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Listing of Claims:

Claim 1 (currently amended): A method of soft handoff of a mobile terminal in an
Internet Protocol (IP) wireless network. said method comprising the steps of:

said mobile terminal obtaining an IP multicasting address;

said mobile terminal creating a multicasting group of a plurality of multicast IP network
interfaces wherein each multicast IP network interface is located at said mobile terminal and is
based on the IP multicasting address; and

simultaneously communicating at the IP level between said multicast IP network
interfaces and a plurality of base stations via separate IP channels between said mobile terminal
and said plurality of base stations.

Claim 2 (currently amended): The method in accordance with claim 1 further comprising
dynamically adjusting the plurality of multicast IP network interfaces within said multicasting
group.

Claim 3 (currently amended): The method in accordance with claim 2 wherein said step of
dynamically adjusting comprises said mobile terminal issuing a joint join message from a
particular multicast IP network interface in order to cause said particular multicast IP network
interface to be included in said multicasting group.

Claim 4 (currently amended): The method in accordance with claim 2 wherein said step of
dynamically adjusting comprises said mobile terminal issuing a leave message to a particular
multicast IP network interface in order to cause said particular multicast IP network interface to
be removed from said multicasting group.

Claim 5 (original): The method of claim 2 wherein said step of dynamically adjusting is
performed in accordance with at least one of error rate, signal strength, and network constraints.

Claim 6 (canceled).

Claim 7 (currently amended):   A method of soft handoff of a mobile terminal in an Internet
Protocol (IP) wireless network, said method comprising the steps of:

said mobile terminal creating a multicasting group of multicast network interfaces;

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simultaneously communicating at the IP level between said multicast network interfaces and a plurality of base stations via separate channels between said mobile terminal and said plurality of base stations;

~~The method of claim 1 further comprising the steps of:~~

extracting frames from multicast messages, each frame including a multicast message portion and a header portion; and

performing IP packet aggregation for a plurality of multicast message portions in order to produce a master IP data packet.

Claim 8 (original): The method in accordance with claim 1 further comprising the step of said mobile terminal tracking CDMA IP pilot signals from a base station to determine the signal strength of a particular communication channel from said base station.

Claim 9 (currently amended):   A method of soft handoff of a mobile terminal in an Internet Protocol (IP) wireless network, said method comprising the steps of:

said mobile terminal creating a multicasting group of multicast network interfaces;

simultaneously communicating at the IP level between said multicast network interfaces and a plurality of base stations via separate channels between said mobile terminal and said plurality of base stations; and

said mobile terminal tracking CDMA IP pilot signals from a base station to determine the signal strength of a particular communication channel from said base station;

~~The method in accordance with claim 8~~ wherein said step of tracking CDMA IP pilot signals includes the steps of:

classifying a CDMA pilot signal as a candidate CDMA pilot signal if a signal strength associated with the CDMA pilot signal exceeds a predetermined threshold, otherwise classifying the CDMA pilot signal as unacceptable; and

classifying said CDMA pilot signal as an active CDMA pilot signal if a base station associated with said candidate CDMA pilot signal indicates that the particular communication channel associated with the candidate CDMA signal is capable of maintaining an IP level communication from the mobile station through the base station to the network.

Claim 10 (currently amended): The method in accordance with claim 1 wherein said simultaneous communication includes the step of transmitting information in a forward direction

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to said mobile terminal by broadcasting the information as a multicast message from the plurality of said base stations to the multicast IP network interfaces in said multicasting group created by said mobile terminal.

Claim 11 (original): The method in accordance with claim 1 wherein said simultaneous communication includes the step of transmitting information in a reverse direction from said multicast IP network interfaces in said mobile terminal to the wireless network in response to a sender of a multicast message to the mobile terminal.

Claim 12 (currently amended): A system for soft handoff of a mobile terminal in a wireless network, said system comprising:

a plurality of base stations connected to the wireless network,

a mobile terminal including a plurality of multicast IP network interfaces each located at said mobile terminal, and

a processor at said mobile terminal, said processor including a medium encoded with processing instructions to

obtain an IP multicasting address,

create a multicasting group of a number of said plurality of multicast IP network interfaces, each interface being based on the IP multicasting address, and

cause simultaneous communication at the IP level over separate communication channels between said number of said plurality of multicast IP network interfaces at said mobile terminal and a number of said plurality of base stations.

Claim 13 (currently amended): The system in accordance with claim 12 wherein said medium is further encoded with processing instructions to dynamically adjust the ones of said plurality of multicast IP network interfaces included in said multicasting group.